The 2005 Kenai Peninsula fire season is another for the record books

by Doug Newbould

Whew! I don't know about you, but I'm sure glad the 2005 fire season is over (knock on wood).

Now I can get reacquainted with my family and friends, and try to catch up on the other aspects of life I set aside these past several months. I know that's probably a futile goal, but I'm an optimist by nature so I'm going to give it the old college try.

The 2005 Alaska wildland fire season has been a notable one—in many respects. So far, 600 wildland fires have burned more than 4,395,000 acres in Alaska, the third-highest total acreage since records have been kept. Of course, last year set the standard for total acreage at nearly 7 million. One interesting aspect of these two consecutive record years is that the national preseason forecasts did not predict above average fire seasons for Alaska.

There are still 80 active fires in the state, all in "monitor" status—meaning the fires are unstaffed and periodically surveilled, usually from the air. Three of the active fires are here on the Kenai Peninsula and all three are in the Refuge: the 10,131-acre King County Creek Fire #344, the 925-acre Irish Channel Fire #416 and the 26,300-acre Fox Creek Fire #450. As of last week, all three were producing limited smoke, occasional short flames and almost no forward spread. This smoldering fire behavior is typical of late season fires burning deep in duff or moss.

The Refuge System in Alaska (16 Refuges) as a whole, experienced a record year in 2005 with 59 fires for a total of 1,534,081 acres. Lightning accounted for the vast majority of Refuge fires, which is normal for interior Refuges such as Yukon Flats, Kanuti, Tetlin, Koyukuk, Nowitna and Selawik. Humans typically ignite more than 90% of the unwanted wildfires on the Kenai Peninsula and within the Kenai National Wildlife Refuge. But this year was different.

On the Peninsula, there were 53 fires this year for a total of 42,814 acres. Lightning ignited 22 of these or about 41% of the wildland fires. The Refuge had a total of 12 fires in 2005 and all were caused by lightning. These are unusual statistics. The total number of fires is less than the average, but the total acreage is

far greater. In fact, the total acreage for the Peninsula and for the Refuge is the highest since 1969 and the third highest since fire statistics have been recorded.

Even more unusual is the number and percentage of natural ignitions (lightning). The lightning detection system in Alaska barely reaches the Peninsula, and not all ground-strikes are recorded, but close to a thousand lightning strikes were recorded this year and that is unprecedented, at least as far as we know.

Another unusual aspect of this fire season for the Refuge, the Kenai Peninsula and for Alaska was its duration. The fire season began in April and lasted into September. Average fire seasons in Alaska last three or four months. But, the last three years in a row we have experienced extended fire seasons of up to six months. It could be argued this is a cyclic phenomenon and not a long-term trend, but there is mounting evidence that global warming is producing fairly drastic climate change in Alaska. So longer, more dramatic fire seasons could become the norm, rather than an anomaly. I guess, we shall see.

But the unusual weather we experienced this summer was not limited to the number of lightning strikes. The most unusual weather phenomenon in my mind was the funnel cloud sighted over the central Peninsula in early July. I was out in the middle of the King County Creek Fire when I heard chatter on my handheld radio about a funnel cloud. The firefighters with me started joking that the firefighter who was reporting the funnel was eating too much smoke and hallucinating due to a lack of oxygen in the brain. Moments later, we all stopped laughing and stood dumbfounded when we saw the funnel for ourselves off to the north.

We've seen an increase in thunderstorm activity on the Peninsula since I moved here in 1991. And I have been amazed both by the frequency and the intensity of thunderstorms this year. The cells have been larger, more numerous and more frequent this year than I have witnessed in all the years I've been here. The first thunderstorms appeared in May and we had lightning again last week.

Before I moved to Alaska, I lived in the Rockies and

on the Great Plains where lightning, thunder and hail were routine. And I know this is weird, but, I have always enjoyed thunderstorms. So when we moved to the Kenai, we were more than a little disappointed by the lack of thunder-bumpers and I know I told my wife on more than one occasion that I missed them—not anymore.

So what is causing this 'sudden' increase in thunderstorm activity on the Peninsula? Well, I have a suspicion it's the result of warmer ocean surface temperatures in the northern Pacific and Cook Inlet and more potential energy in the atmosphere. But, we will have to wait a few years to see if a trend develops and if lightning fires begin to dominate the fire regime here.

The most rewarding aspect of this fire season for me was the lack of human-caused ignitions on the Refuge. My hope is that it's due to our wildland fire prevention activities and to the diligence of our citizens to practice fire safety. But again, we'll have to wait to see if a trend develops.

Doug Newbould has been the Fire Management Officer at the Kenai National Wildlife Refuge since 1999. Previous Refuge Notebook columns can be viewed on the Web at http://www.fws.gov/refuge/kenai/.